6/19/92

BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

ITT RAYONIER, INC. Appellant, v. State of Washington DEPARTMENT OF ECOLOGY, Respondent.	PCHB Nos. 91-200, 247 and 92-64 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

Procedural History

This matter involves ITT Rayonier, Inc.'s appeal of four Department of Ecology Orders regarding alleged visual opacity violations from the ITT pulp mill in Port Angeles, Washington. Part of these appeals has settled.

On August 21, 1991 ITT Rayonier, Inc. ("ITT") filed an appeal with the Pollution Control Hearings Board contesting Department of Ecology's ("Ecology") issuance of Enforcement Order No. DE-AQI069. The Order was based upon alleged visual opacity violations from the Port Angeles pulp mill's hog fuel boiler. This appeal became PCHB No. 91-200.

On November 27, 1991 ITT filed an appeal contesting Ecology's issuance of Enforcement Order No. DE-AQI100 regarding the Port Angeles facility's sulfur recovery boiler. The Order alleged there had been opacity violations. This appeal became PCHB No. 91-247.

On December 18, 1991 Ecology issued Penalty Order No. DE91-AQ119 ($40,400) for alleged opacity violations from June 25, 1991 through October 3, 1991 from the hog fuel boiler and the sulfur recovery boiler. ITT filed with Ecology an Application for Relief from the penalty. On February 27, 1992 Ecology denied the request. On March 3, 1992 Ecology issued Penalty Order No. DE-AQI040 ($10,000) for other alleged opacity violations from the facility's hog fuel boiler. These two Orders were jointly appealed to the Board and jointly numbered PCHB No. 92-64.

By agreement of the parties, the three appeals (of the four Orders) were consolidated for hearing. Hearing briefs were filed. The hearing on the merits began on April 15, 1992 in Lacey, Washington.

Present for the Pollution Control Hearings Board were Attorney Member Judith A. Bendor, Presiding; Chairman Harold S. Zimmerman, and Member Annette McGee. Appellant ITT Rayonier was represented by Attorneys Timothy Butler and Annette Hayes (Heller, Ehrman, White & McAuliffe; Seattle). Respondent Ecology was represented by Assistant Attorney General Mary Sue Wilson. Court reporters affiliated with Gene S. Barker and Associates (Olympia) took the proceedings.

Argument on a Motion for Partial Summary Judgment was held. (See Order Granting Partial Summary Judgment for details.) By preliminary ruling that day, later confirmed by Order, the Board concluded that as a matter of law, the maximum opacity penalty Ecology could assess

under WAC 173-400-230(2) was $400 each day for each emissions unit, not $10,000. The parties adjourned to discuss settlement, reached agreement on several issues, and announced the results to the Board. The parties entered a stipulated Revised Statement of the Case on April 29, 1992.

The hearing reconvened on April 30, 1992 and continued on May 1, 1992. The Board, the parties' representatives, and the court reporter were the same as before. Opening statements were made. Witnesses testified and exhibits were admitted. Closing argument was made. Revised hearing briefs were filed. On May 20, 1992 with the filing of additional legal argument on the motion. Those Board Members who missed select portions of the hearing have reviewed tape recordings of the proceedings.

For the matters still in contention, and from the foregoing, the Board now makes these:

FINDINGS OF FACT

I

Hog Fuel Boiler

The ITT pulp mill at Port Angeles produces pulp using a sulfite pulping process. A hog fuel boiler at the mill burns wood waste and sludges from the wastewater treatment system. The boiler ultimately releases its emissions into the outside air through three stacks.

Inside the plant, gases and particles from the boiler go to a multiclone air pollution system for removal of larger particles. The remaining gases and particles go to three electrostatic gravel bed precipitators, which release to the outside air through one of three stacks. The three stacks are in a straight line, from north to south, about nine feet from each other.

Sulfur Recovery Boiler

II

The sulfur recovery boiler burns spent pulping liquor, recovering energy. Previously the liquor had been released to the waters of the state.

The sulfur recovery boiler releases gases and particles. These are first treated in a cooling absorption tower, where sulfur dioxide is recovered for re-use. The gaseous stream that leaves the tower still contains some sulfur dioxide and particles, and is saturated with water. This mixture passes through a demister pad to remove some of the water, and then proceeds to the demister system (brand name: Brinks). The demister system is designed to remove small particles and small water droplets.

III

At the ITT Port Angeles facility, the system consists of six demisters connected in parallel. Each demister is about 20 feet in diameter and 20 feet high. At most five demisters are operating at

one time, while one is off-line being cleaned with acid condensate to dissolve and remove particles. If one of the remaining five operating demisters is not working properly, it, too, can be taken off-line. Then only four demisters would be operating. The system is designed so it can be entirely bypassed.

IV

Within each demister there are 21 "candles". Each candle is 18 to 24 inches in diameter. Glass fiber on each candle is four to six inches thick, which serves to filter out small particles and entrained water. The candles' open side is on the bottom, where the gases and particles enter. (The candles are placed upside down, like inverted glasses.)

The relative pressure differential of the demisters is checked six times each day, to determine, in part, if the system is operating properly. A written log is kept of this check. Overall particulate monitoring is also done, which can provide some information to assess whether the demisters are operating properly.

V

Semi-annually the plant is shut down and each demister is checked. Each candle is given a pressure test to determine if it is properly working. As the candles age, the glass fibers shrink. This shrinkage affects the candles' performance. Core samples of the fibers are taken and scanned by electron microscopy, to determine if

significant deterioration has occurred.

The average life span of a candle is three years. If the semi-annual check reveals a particular candle is not working properly, a plate is to be put under it and the candle bypassed, i.e. the gas/particle stream goes to the remaining candles. At some point, all the candles are replaced at the same time.

Opacity

VI

Opacity is defined in Washington regulation as:

> the degree to which an object seen through a plume is obscured, stated as a percentage. WAC 173-400-030.

More generally, it is the amount of light obscured when one looks at something.

The opacity in a plume is dependent upon the amount, size and nature of particles in the plume. Some particles are formed during combustion, while others exist because of incomplete combustion. Other particles are formed in the plume itself, from the gases emitted. If the particles and gases are not first collected by pollution control equipment, opacity can result.

Poorly operated and maintained equipment can increase opacity.

VII

In Washington State, opacity readers are certified on a regular basis. To pass the certification test, a reader is required to have every reading within 15% of a smoke machine's actual reading, and the

average of all readings must be within 7 1/2%. There is at present no specific training for reading multiple plumes.

VIII

When a plume leaves a stack, there is a tendency for it to bunch up and form a cone or cylinder. If three to four stacks are close together, their plumes tend to bunch up and combine.

IX

Stipulated Facts:

On six occasions between June 26, 1991 and December 1991, certified opacity readers from Ecology and the Olympic Air Pollution Control Authority recorded visual opacity readings which exceeded the 20 percent opacity standard for the hog fuel boiler. The readers positioned themselves with the sun within a 140 degree sector to their backs, so their line of vision was approximately perpendicular to the plume direction, south of the three stacks.

On these occasions, the readers were unable to determine whether a single plume, or multiple plumes one behind the other, were being observed. From the opacity readers' perspectives, however, they were observing what appeared to be a single plume.

X

In the 1970s the Department of Ecology developed Source Test Methods 9A and 9B, for the visual determination of opacity. Ecology derived the test methods after consulting existing Environmental

Protection Agency Guidelines for Evaluation of Visual Emissions, and other states' methods including those used to certify opacity readers. (The EPA's Quality Assurance Handbook for Air Pollution Measurements was adopted later, in February 1984.)

Washington Source Test Methods 9A (three minute test) and 9B (six minute test) provide in relevant part:

> The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140 degree sector to his [sic.] back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g. stub stacks on baghouses).
> Exhs. A-1 & 2.

EPA's Method 9 is identical. 40 CFR Part 60, Appendix A, Method 9.

XII

Opacity releases from a facility can be transitory, a fleeting occurrence. When the inspector is on the scene, it may not be physically possible at the same time to be in all the positions listed in the Methods.

XIII

Reading opacity is very sensitive to the position of the sun.

One cannot accurately read a plume if the sun is not within 140 degrees behind the reader's back.

Water in a plume increases opacity. But such opacity is not to be part of the total opacity figure for purposes of a violation. See WAC 173-400-040(1)(b).

It is more accurate to read a plume perpendicular to its direction of movement. This enables the reader to better determine at what point in the plume any steam has dissipated, and to read the plume beyond that point. This position also allows the reader to look through the plume's width, not down its length. (See Finding of Fact XIV, below, discussing path length.)

Accuracy of a reading is generally enhanced if one reads a plume against a contrasting background.

XIV

If all other factors remain constant, and there is opacity in the plume, reading increased path length generally tends to increase the opacity reading. For example, if the stack were rectangular in shape, the opacity observed would likely be higher if one looked through the long width of the rectangular plume, rather than the short distance. Path length remains the same only with a perfectly round stack.

There are situations when there are multiple stacks in a row. If one reads opacity through the long axis, this can complicate the reading, leading to a different reading than if one read only one plume. The degree of difference is difficult to assess, in part

because if one changed one's position so as to read individual plumes, the sun position might be different, the background could change, and so forth. But, if one were to assume all the other factors did not change, and there are circular stacks, then if one were to read several plumes at once as if they were one, this could result in a higher observed opacity than if one were to read only one plume.

Sulfur Recovery Boiler History

XV

On January 11, 1973, ITT Rayonier filed with Ecology a Notice of Construction for the sulfur recovery boiler. The filing included a commitment to meet applicable particulate emission limits by installing auxiliary particulate pollution control equipment. Ecology did not issue an Order of Prevention of Construction within one month, and therefore by operation of law, construction could proceed.

XVI

Effective July 16, 1973, RCW 70.94.152 had been amended to require new sources of air contaminants to have all known, available and reasonable emissions controls ("AKART"). Ecology concluded this requirement applied to the ITT sulfur recovery system at Port Angeles.

On October 9, 1973, the company met with Ecology and proposed to limit emissions without installing the auxiliary equipment. Ecology had concluded this proposal was not encompassed under the previous Notice of Construction, and was therefore not otherwise authorized by the Department's previous inaction.

The parties discussed an ITT sulfur resource recovery facility being built in Quebec, Canada. The facility was designed to operate without auxiliary particulate control equipment, and was scheduled to be in operation before the Port Angeles one. Ecology stated that if the Quebec facility were to be used to determine if the Port Angeles facility could proceed without auxiliary equipment, then Ecology would use "no visible emissions" as the measure, equivalent to what a mist eliminator would achieve. Exh. A-24. Sulfur recovery facilities were already operating with emissions of less than 10% visual opacity.

The parties met again on December 6, 1973, to discuss ITT's proposal to use in-process controls, rather than auxiliary particulate control equipment. Ecology stated it would require prompt ordering of the equipment if the Quebec mill did not achieve a nearly invisible plume. Exh. A-25.

XVII

On January 8, 1974, Ecology issued Order No. DE 74-9. The Order was based on all known available and reasonable technology, AKART. The Order limited visual emissions from the Port Angeles sulfur recovery system to not exceed 10% opacity, except for uncombined water vapor. Particulate emissions were limited to 2.5 pounds per ton of pulp produced. The Order approved construction without auxiliary particulate pollution control equipment, provided emissions limitations would not be exceeded. The Order allowed this to be

demonstrated initially by the Quebec facility.

XVIII

The Quebec facility's construction and operation did not proceed in the expected time frame. ITT made an additional technical presentation to DOE about the Port Angeles system in August 1974. Ecology issued Modified Order No. DE 74-9 on October 1, 1974, requiring the ordering of auxiliary pollution equipment, but still providing ITT an opportunity to demonstrate the equipment need not be purchased and installed. The Order was again based on AKART. Exh. A-29.

The Order stated in part:

> II. DETERMINATION
>
> [...] concerning particulate emissions control at the mill, the Department determines:
>
> The proposed project will be deemed to accord with Chapter 70.94 RCW and all applicable regulations and to provide all known, available and reasonable methods of emission control, if
>
> 1. Visual emissions from the recovery system, as defined by WAC 18-38-020(8), at no time exceed ten (10) percent opacity, except for uncombined water vapor, [...].
>
> III. ORDER
>
> The Department hereby orders that:
>
> 1. The Corporation shall order the auxiliary particulate control equipment [...]
>
> 2. After October 1, 1975, the emissions limitations set forth in II, above, may at no time be exceeded.

> 3. The Corporation must demonstrate to the Department's satisfaction, that operations at its Port Angeles, Washington facility have been successful in meeting the emissions limitations set forth in II above, without the use of auxiliary particulate control equipment. Exh. A-29.

XIX

An in-stack monitor was installed to measure particulate emissions and opacity.

ITT was not able to prove that auxiliary equipment was not necessary, and the Brinks demisters were purchased and installed. Permittee had provided information to Ecology that with demisters, the plume from the recovery furnace would have an opacity from 0 to 10%.

XX

By October 1975, ITT determined the in-stack monitor was not accurately reporting opacity from the sulfur recovery boiler, because the plume was saturated with water.

XXI

On March 29, 1977, ITT sent to Ecology a detailed "Monitoring and Reporting Program" for the facility, to comply with Chapt. 173-410 WAC. In its submittal, ITT stated that Part II of the Program:

> describes several proposed changes <u>which will bring our existing monitoring and reporting program into conformity</u> with the revised regulations. Exh. A-33; emphasis added.

ITT's proposed Part II for the sulfur recovery unit stated:

> PROPOSED MONITORING ADDITIONS OR DELETIONS
> [...]
> 3. Opacity:
>
> a. Continuous opacity monitoring equipment for compliance purposes is not available because of a wet plume. Instead, report the operation mode of the Brinks demisters on a daily basis as the number of hours on/off line. Typical plume opacity with Brinks on-line is 0 - 10% after dissipation of water vapor. With the Brinks off-line, the typical opacity is greater than 60%. In-stack EDC opacity monitor records Brinks on-line as opacity as 90 - 95%, and Brinks off-line opacity as 100%. Exh. A-33; emphasis added.

XXII

On February 28, 1978, Ecology issued Regulatory Order No. DE 78-101, Exh. A-34. At page three, (see Attachment A to this decision), the emissions limitations show the opacity limit to be 10%, and the test method for self-monitoring to be Monitoring Brinks Demisters and references Appendix B.

A Fact Sheet was included with the Order. It states in pertinent part:

> FACT SHEET
>
> [...]
> HISTORY OF AIR EMISSION CONTROL PROGRAM
> [...]
> 2. Particulate
>
> The only major particulate source is the recovery furnace, which averages about 1.1 pound per ton of pulp produced. Demisters are used to keep the emissions below the state standard of 2.5 pounds per ton.

3. Opacity

> Opacity from the recovery furnace stack is normally around 5 percent in contrast to the state standard of 10 percent. [...]

Appendix B of the Order (see Attachment A to this decision) is entitled: Approved Test Methods. It states in part:

1. EDC Monitor and Monitoring Brinks Demisters

> The recovery system stack shall be monitored for opacity by reporting the operation of the Brinks Demisters. When the demisters are on line, the 10 percent opacity standard is met.

[Exh. A-34, emphasis added.]

XXIII

On February 29, 1980, Ecology issued Regulatory Order No. DE 80-196 for the sulfur recovery boiler. (Exh. A-4; see excerpts at Attachment B to this opinion.) The Order had a Part A, with more extensive General Conditions; a Part B, including Specific Provisions, and an Appendix B, Approved Test Methods. No fact sheet was included.

There were some changes from Regulatory Order DE 78-101. For example, under the Part B. Specific Provisions (1) Emissions, this text is new:

> Subject to the terms of this order, the sources described herein shall comply with the emission limitation for the pollutant indicated, and emissions shall be determined using the average period, sampling frequency, method and reporting frequency indicated.

There are other minor changes, as can be seen from the attached excerpt; Attachment B to this Opinion. Appendix B remained the same as in Order 78-101.

XXIV

Ecology's standard operating procedure in issuing such orders was to list requirements the permittee or licensee must comply with, not to list its own inspection or enforcement practices.

XXV

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such.

From these Findings of Fact, the Board enters these:

CONCLUSIONS OF LAW

I

The Pollution Control Hearings Board has jurisdiction over these parties and these issues. Chapts. 43.21B and 70.94 RCW.

II

The legal issues remaining for this Board to adjudicate are:

1. When an emissions source has three stacks that are in a line, and an opacity reading is taken with the sun behind the observer's back (within 140 degrees), and the observer is approximately perpendicular to the plume direction, but the observer was unable to determine whether s/he was observing a single plume or multiple plumes one behind another, can such a reading support an opacity violation under Washington law?

2. For the resource recovery boiler, if the demisters are on-line, what opacity level does the boiler have to meet under the law and Regulatory Order No. DE 80-196?

III

Under General Regulations for Air Pollution Sources, the general standards for maximum emissions at WAC 173-400-040 state in pertinent part:

> All sources and emissions units are required to meet the emission standards of this chapter. Where an emission standard listed in another chapter is applicable to a specific emissions unit, such standard will take precedent over a general emission standard listed in this chapter.
> [...]
> (1) Visible emissions. No person shall cause or permit the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity except:
> [...]
> (b) When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed twenty percent.
> (c) When two or more sources are connected to a common stack, ecology or the authority may allow or require the use of an alternative time period if it is more representative of normal operations.
> (d) when an alternate opacity limit has been established per RCW 70.94.331(2)(c). [Emphasis added].

IV

An "emission standard" is:

> an allowable rate of emissions, level of opacity, or prescribing equipment or operating conditions as set forth in a regulation or regulatory order to assure continuous emission control. WAC 173-400-030(23).

We conclude that opacity standards are emission standards.

V

A "source" is defined as:

> all of the emissions unit(s) including quantifiable fugitive emissions, which are located on one or more contiguous or adjacent properties under the control of the same person(s) and those activiites that are secondary to the production of a single product of a functionally related group of products. WAC 173-400-030(63).

We conclude the entire ITT Port Angeles facility is a "source" under WAC 173-400-030(63).

VI

An "emission unit" is":

> any part of a source which emits or would have the potential to emit any pollutant subject to regulation. WAC 173-400-030(24).

We conclude the hog fuel boiler in its entirety is an "emission unit" under WAC 173-400-040, -030(24), and -070.

Opacity

VII

For convenience, we now repeat the Washington Source Test Methods:

> The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140 degree sector to his [sic.] back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his

observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g. stub stacks on baghouses).
Exhs. A-1 & 2.

VIII

The legal issue is: where is opacity to be determined?

WAC 173-400-040(1) states:

> at the emission point, or within a reasonable distance of the emission point [...]

We have concluded that an opacity reading of a combined plume can be a valid reading. Kaiser Aluminum & Chem. Corp.v. Department of Ecology and PSAPCA, PCHB No. 80-168; St. Regis Paper Co. v. PSAPCA, PCHB No. 80-224.

Opacity releases from a facility can be transitory. When the inspector is on the scene, it may not be physically possible to be at the same time in all the positions listed in the Methods.

The parties have not addressed whether the Methods themselves as a whole are mandatory, i.e. rise to the level of adopted regulation. We therefore decline to reach a conclusion in that regard. For purposes of this analysis only, it will be assumed they are mandatory.

In the Methods, the words/phrases "shall", "shall as much as possible", and "should" are all used in the same paragraph. The paragraph is written in the present tense.

We return again to the language of Method 9A, which specifies an array of positions with varying degrees of importance. In the context

these Methods, we conclude the different words/phrases have different meanings. See, State v. Rains, 87 Wn.2d 626 (1976). Only "shall" is mandatory, with the most important position being the sun within an arc of 140 degrees of the inspector's back.

After meeting this position, then next in importance, as much as possible while still keeping the sun within the prescribed arc, the observer shall be perpendicular to the plume direction. This position is important, as reflected in the "shall" language. But if not possible while still maintaining the proper sun position, then the sun position is to be observed.

Lastly, "should" is advisory, and of lesser importance.

Additionally, one is supposed to read a plume beyond the point of uncombined water, which may be a reasonable distance from its emission point.

We conclude the readings described in Finding of Fact IX, above, can sustain an opacity violation under Washington law.

Whether violation(s) did occur, however, has not been litigated and therefore is not determined. At any such adjudication, the composite effect of an inspector's position is weighed to determine if the reading was reliable. See, International Paper Co. v.SWAPCA, PCHB Nos. 77-55, et al.

Sulfur Recovery Unit Opacity Limit

IX

This Board has to determine what opacity emission standard applies to the ITT Port Angeles sulfur recovery boiler.

We conclude that Order 80-196's opacity limits are based on AKART. AKART in 1973-74 was shown to be no visible emissions, or a maximum of 10% opacity.

Appellant ITT contends the plain language of the last sentence of Appendix B. 1 of the Order means that when the demisters are on-line, only visual opacity readings greater than 35% constitute opacity violations.

Respondent Ecology contends the Order requires the 10% standard be met, and under Appendix B the company is fulfilling a monitoring requirement when it reports the demisters' status.

X

We conclude that when Order DE 80-196 is read as a whole on its face, the Order is ambiguous. The Order's Part B lists the opacity emissions limitation as 10%. Yet there is a sentence in Appendix B about the demisters on-line and the 10% opacity standard being met.

Because there is ambiguity, the Board is required to construe the Order. In doing so, the Order is to be read as a whole, with each part construed so the Order is in harmony. See, Sutherland, Statutory Construction, Vol. 2A, Sec. 46.05, p. 90. The Board has to ascribe

meaning to the context of particular sentences. See, id. If a particular sentence is in conflict with the general meaning and purpose of the order, then the sentence is to be construed so as to be consistent with the order's purpose. See, Sutherland, supra, at p. 92.

XI

In construing Orders, the Board is required to determine the purpose and intent of the issuing agency. ITT Rayonier v. Ecology, 91 Wn.2d 682, 686, 586 P.2d 1155 (1978).

We believe the opacity limit was not negotiated between the parties. If the Order were negotiated, the Board would have to determine the intent and purpose of both parties. ITT, supra, at 687.

XII

Under either approach, however, we conclude the opacity limit is 10%, and reporting the demisters' status is a company monitoring provision. We turn to the history of the Order's development.

Nineteen years ago opacity control technology to meet no visible emissions, or no more than 10%, was known, available and reasonable. Other sulfur recovery facilities in 1973 met either the no visible emissions level, or a maximum of 10% opacity.

The company was fully aware when they embarked to add the sulfur recovery unit, the opacity limit was 10%.

Two previous orders for this same unit had a 10% opacity limit: Order DE 74-9 issued January 8, 1974, and revised Order 74-9 issued in

October 1, 1974.

Under both these Orders, the company had a duty to self-monitor for opacity. No party has suggested the self-monitoring in Order 74-9 somehow replaced Ecology or the local air agency's authority to conduct opacity inspections.

After the unit was installed under modified Order DE 74-9, ITT discovered its self-monitoring equipment for opacity was not working due to saturated water in the plume. As a result, ITT itself suggested the company fulfill its duty to monitor for opacity by reporting the status of the demisters:

> Continuous opacity monitoring equipment for compliance purposes is not available because of a wet plume. Instead, report the operation mode of the Brinks demisters on a daily basis as the number of hours on/off line. [Exh. A-33; see Finding of Fact XXI, above, for a longer quote.]

As a result, the two subsequent orders issued.

There has been no evidence presented, whatsover, that there was any intent by either party for these two subsequent orders to change the status quo, to change the opacity limits recited in the previous orders. **Rather, the orders were changed to accommodate the limitations of the ITT self-monitoring system.**

Given all the evidence presented in this case, we construe the opacity limit to be 10%, and the reporting of the demisters to be a company self-monitoring provision. Such a construction is harmonious

with the rest of the Order, previous orders, the intent of Ecology, and even the intent of ITT.

Moreover it is consistent with the requirements for all known available and reasonable technology and the State Clean Air Act.

Appellant's theory would allow the company, 19 years after it knew there was a 10% opacity limit, to take unfair advantage of a technical drafting ambiguity.

XIII

Any Finding of Fact which is deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions of Law, the Board enters the following:

ORDER

1. The hog fuel boiler visual opacity readings taken from June to December 1991 as a matter of law can support an opacity violation under Washington law. Whether the readings support any violations is a question of fact not litigated, and therefore this Board makes no such determination.

2. Order DE 80-196 for the resource recovery facility limits visual opacity to no greater than 10%. The status of the demisters is a monitoring requirement, not an opacity limit.

DONE this 19th day of June, 1992.

POLLUTION CONTROL HEARINGS BOARD

JUDITH A. BENDOR, Presiding

HAROLD S. ZIMMERMAN, Chairman

ANNETTE S. McGEE, Member

Attchs.

B. Specific Provisions

(1) Emissions

Subject to the terms of this order, the sources described herein shall comply with the emission limitation for the pollutants indicated, and emissions shall be determined using the average period, sampling frequency, method and reporting frequency indicated.

	Source	Pollutant or parameter	Limitation	Averaging Period	Sampling Frequency	Reporting Frequency	Test Method
a.	Recovery Furance	Particulates	2.5 lb/ADUT	Monthly	Quarterly	Quarterly	DOE Method 5
		Opacity	10 %	6 min/hour	Continuous	Monthly(4)	EDC & Brinks Status(4)
		SO_2	300 ppm	Hourly	Continuous	Monthly	EDC DIGA-1400
b.	Acid Plant, Blow System, Miscellaneous sources(2)	SO_2	3000 lb/day	Daily	Continuous	Monthly	DOE Approved
		SO_2	165 lb/hr	Hourly	Continuous	Monthly	Monitor(4)
c.	Mill	SO_2	15 lb/ADUT(3)	Monthly	---	Monthly	Calculated

(1) Reporting Excursions only
(2) Miscellaneous Sources shall include washer vents, tank vents, and other sources as described in the mill system description.
(3) Not including SO_2 from oil burning
(4) See Appendix B

Attachment B

EMISSION LIMITATION AND MONITORING SCHEDULE

Source	Parameter	Limitation	Averaging Period	Sampling Frequency	Reporting Frequency	Test Method***
Recovery Furnace	Particulate	2.5 lb/ADUT	Monthly	Quarterly	Quarterly	DOE Test Method 5
	Opacity	10%	6-minute per 60 minutes	Continuous	Monthly *	EDC Monitor and Monitoring Brinks Demisters.
	Sulfur Dioxide	300 ppm	Hourly	Continuous	Monthly	EDC Monitor, Model DIGA-140J.
Acid Plant (West Limerock Tower)	Opacity	35%	6-minute per 60 minutes	Monthly	Monthly *	DOE Test Method 9B.
	Sulfur Dioxide	800 ppm	Hourly	Continuous **	Monthly	Dynasciences Model 122.
Blow System (North and South Limerock Towers)	Sulfur Dioxide	0.2 lb/ min/ADUT	15-minute	Continuous **	Monthly	Dynasciences Model 122.
Mill	Sulfur Dioxide	20 lb/ADUT	Monthly	----	Monthly	Calculation

*Report excursions only
**Monitor time-shared between the three limerock towers
***See Appendix B

Attachment A

APPENDIX B

APPROVED TEST METHODS

1. EDC Monitor and Monitoring Brinks Demisters

   The recovery system stack shall be monitored for opacity by reporting the operation of the Brinks Demisters. When the demisters are on line, the 10 percent opacity standard is met.

2. EDC Monitor, Model DIGA-1400

   This monitor is an approved test method for SO_2.

3. Dynasciences Model 122

   This monitor is an approved test method for SO_2.

4. DOE Method 5 and 9B

   This method is described in "Source Test Manual Procedures for Compliance Testing," State of Washington Department of Ecology, May 1977.

INFORMATION ON EXHIBITS

Please notify Ms. Robyn Bryant of this office by July 20, 1992 if you will be arranging to have your oversized exhibits retrieved.

If you do not notify us, absent an appeal, the exhibits will be discarded. If the matter is appealed, the exhibits are sent to Superior Court.

Pollution Control Hearings Board
Shorelines Hearings Board
Forest Practices Appeals Board
Hydraulics Appeals Board

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STATE OF WASHINGTON

ENVIRONMENTAL HEARINGS OFFICE

Location: 4224 - 6th Avenue SE, Bldg. 2, Rowe Six, Lacey, WA 98504-0903
Mailing Address: MS: PY-21, P.O. Box 40903, Olympia, WA 98504-0903

June 18, 1992

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Assistant Attorney General
Department of Ecology
P. O. Box 40117
Olympia, WA 98504-0117

RE: PCHB No. 91-200, 91-247 and 92-64
ITT RAYONIER, INC. v. DOE

Counsel:

Enclosed are the Findings, Conclusions and Order of the Pollution Control Hearings Board.

This is a FINAL ORDER for purposes of appeal to Superior Court within 30 days, pursuant to WAC 371-08-220.

The following notice is given per RCW 34.05.461(3): Any party may file a petition for reconsideration within 10 days and serve it on the other parties. The term "file" means receipt.

Very truly yours,

Judith A. Bendor, Presiding

JAB/jg/ITT2
Enc.\
cc: John Williams - DOE

I certify that I mailed a copy of this document to the persons and addresses listed thereon, postage prepaid, in a receptacle for United States mail at Lacey, Wa on 6/19/92.

arising out of those Orders and fully sets forth all obligations of each party arising thereunder.

DATED this 4th day of June, 1992.

KENNETH O. EIKENBERRY
Attorney General

Mary Sue Wilson, WSBA #19257
Assistant Attorney General
Attorneys for State of Washington Department of Ecology

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latest within 30 days after the PCHB enters its Order with respect to the hog fuel boiler issue.

b. $1,200.00 at the latest within 30 days after the PCHB enters the attached Stipulation and Order.

7. The parties agree that Rayonier reserves the right to challenge the opacity readings taken by Ecology and the Olympic Air Pollution Control Authority between June 25, 1991, and December 13, 1991 ("the opacity readings"), at any time in the future if Ecology takes any enforcement action or issues any order that is in any way related to or based upon:

a. the opacity readings;

b. any actions taken by Rayonier to comply with this Settlement Agreement; or,

c. any data or reports submitted to Ecology as listed in paragraph 2.

The parties agree that Ecology reserves all rights to assert with respect to such future enforcement actions or orders that Ecology's authority to take such enforcement actions or issue such orders does not require proof of the opacity readings.

8. Ecology agrees to and hereby withdraws Order No. DE 91-AQI069, Order No. DE 91-AQI100, Penalty Order No. DE 91-AQI119 and Penalty Order No. DE 92-AQI040 with prejudice, and Rayonier agrees to and hereby dismisses its appeals of Order No. DE 91-AQI069, Order No. DE 91-AQI100, Penalty Order No. DE 91-AQI119 and Penalty Order No. DE 92-AQI040 with prejudice. This Settlement Agreement constitutes full and final settlement of any and all disputes

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Ecology. In order to require Rayonier to implement any of the studies and plans or act based upon any of the information identified in paragraph 2 of this Settlement Agreement, the parties agree that Ecology will have to issue a separate Order. Such Order is subject to challenge as allowed under all applicable laws and regulations.

4. Rayonier agrees that:

a. it will keep one spare set of demister candles on site at all times beginning on August 1, 1993.

b. "one spare set of demister candles" constitutes one set of demister candles in addition to the six sets of demister candles that are installed on the recovery boiler;

c. if it uses the spare set of demister candles described in paragraph 4.a., Rayonier will immediately order another set of spare demister candles. This action shall constitute full compliance with paragraph 4.a.

5. The parties agree that the submittal of the studies and information listed in paragraph 2 and implementation of the agreed upon schedule for keeping one spare set of demister candles on site as described in paragraph 4 satisfies the requirements of Order No. DE 91-AQI100.

6. Rayonier agrees to pay to Ecology:

a. $2,400.00 if the PCHB finds for Ecology or $0.00 if the PCHB finds for Rayonier with respect to the issue of how to properly read opacity that is emitted from the three hog fuel boiler stacks at the Rayonier Port Angeles facility ("hog fuel boiler issue"). Rayonier will pay this sum to Ecology at the

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temperature at the point of the probe when it observes the parameter in paragraph 1.a.i.

e. Rayonier will submit to Ecology a final report on the study described in paragraphs 1.a., 1.b., 1.c., and 1.d. within six months from the date that the Pollution Control Hearings Board signs the attached Stipulation and Order.

f. If a reasonable correlation is established between opacity and one or more of the parameters in paragraph 1.a., Rayonier will perform a control study. Beginning with an opacity of less than 20%, Rayonier will alter the parameters listed in paragraph 1.a. until degradation of plume quality occurs. Rayonier will prepare a study plan and submit it to Ecology for approval. Failure of Ecology to approve the study plan submitted by Rayonier shall not constitute a breach of this Settlement Agreement by either party.

2. The parties agree that Rayonier has submitted to Ecology:

a. a study of the installation of an upstream scrubber on May 8, 1992.

b. a study of a demister isolation system and a study of a demister monitoring system on February 21, 1992, and March 13, 1992.

c. data on the operation of the recovery boiler on February 15, 1992.

3. The parties agree that paragraphs 2, 3, and 4 of Order No. DE 91-AQI100 required the submission, but not the implementation, of certain studies, plans, and information to

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i.	Plume opacity (est.)	2/weekday
ii.	Meteorological conditions	2/weekday
	Temperature	
	Percent cloud cover	
	Relative humidity	
	(Until Rayonier's meteorological station becomes operational, Rayonier will collect temperature and relative humidity data by hand.)	
iii.	Fuel characteristics	
	Chloride concentration	1/shift
	Moisture content	1/shift
	Sludge solids	2/shift
	Primary/secondary sludge ratio	daily avg
	Boiler steaming rate	2/shift
iv.	Miscellaneous data	
	Screw press polymer use	1/day
	Total sludge to hog fuel pile	1/day
	Hog fuel burned (est. by source)	1/week

b. During the course of the study, Rayonier will record observations on the condition of the boiler bed and the fuel mix that is burned when the above parameters are observed.

c. Rayonier will determine chloride concentration of the hog fuel using an ion specific electrode.

d. Rayonier will make a good faith effort to install temperature probe in the firebox of the hog fuel boiler and, if such installation is reasonably feasible, will record the

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BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

ITT RAYONIER, INCORPORATED, Appellant, v. WASHINGTON STATE DEPARTMENT OF ECOLOGY, Respondent.	PCHB Nos. 91-247, 91-200, 92-64 SETTLEMENT AGREEMENT

The parties to the above captioned matter, ITT Rayonier, Inc. ("Rayonier"), and the State of Washington Department of Ecology ("Ecology"), desiring by this instrument to stipulate to an order dismissing appellant Rayonier's appeal and to release each other from any and all claims, counterclaims, and causes of action except those heard by the Pollution Control Hearings Board ("PCHB") on April 15, April 30, and May 1, 1992, enter into the following Settlement Agreement:

1. Rayonier agrees that it will study the operation of the hog fuel boiler in accordance with the following study plan:

a. Rayonier will observe the plume at regular intervals under normal conditions for ninety days. In addition to the visible observations, the following parameters will also be measured and recorded

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May 1, 1992, are hereby dismissed with prejudice, and without costs or attorneys' fees to any party.

DATED this 2nd day of ~~June~~ July, 1992.

Judith A. Bendor, Presiding

APPROVED FOR ENTRY:

Harold S. Zimmerman, Chairman

HELLER, EHRMAN, WHITE & MCAULIFFE

Annette S. McGee, Member

By: _____
Timothy H. Butler, WSBA #19841
Attorneys for ITT Rayonier, Inc.

KENNETH O. EIKENBERRY
Attorney General

By: _____ (by TBB)
Mary Sue Wilson, WSBA #19257
Assistant Attorney General
State of Washington, Department of Ecology

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BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

ITT RAYONIER, INCORPORATED, Appellant, v. WASHINGTON STATE DEPARTMENT OF ECOLOGY, Respondent.	PCHB Nos. 91-247, 91-200, 92-64 STIPULATION AND ORDER OF PARTIAL DISMISSAL

THIS MATTER, having come on for hearing upon the stipulation of appellant ITT Rayonier, Inc. ("Rayonier") and respondent State of Washington Department of Ecology ("Ecology"), by and through their undersigned counsel, for the entry of an order dismissing with prejudice all claims except those heard by the Pollution Control Hearings Board ("Board") on April 15, April 30 and May 1, 1992, and without costs or attorneys' fees to any party, pursuant to a Settlement Agreement entered into between said parties; all parties having been afforded proper notice and an opportunity to respond to the aforesaid Stipulation; and the Board having read and considered all the relevant files and records herein, and being fully advised, NOW, THEREFORE,

IT IS HEREBY ORDERED, ADJUDGED AND DECREED, that all of the claims, counterclaims and all other claims asserted in this action other than those heard by this Board on April 15, April 30, and

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